

What Is Claimed Is

1. A prosthetic tibial component for a
5 prosthetic total knee joint, said component comprising
two constructs, one being a metal base construct that
engages the bone and the other being a polyethylene
bearing construct that attaches to the metal base
construct and articulates with a prosthetic femoral
10 component on the opposing side of the joint, where
said metal base construct is composed of two different
metals, a first metal which engages the bone surface
and a second metal which engages the polyethylene
bearing construct, with the first metal being selected
15 so as to provide a superior bone-engaging face, and
the second metal being selected so as to provide a
superior polyethylene-engaging face.

2. A prosthetic tibial component according to
20 claim 1 wherein said first metal comprises titanium.

3. A prosthetic tibial component according to claim 1 wherein said first metal comprises a titanium alloy.

5 4. A prosthetic tibial component according to claim 1 wherein said first metal comprises tantalum.

10 5. A prosthetic tibial component according to claim 1 wherein said first metal comprises a tantalum alloy.

15 6. A prosthetic tibial component according to claim 1 wherein said first metal comprises a material which is highly biocompatible and which exhibits good bone ingrowth properties.

7. A prosthetic tibial component according to claim 1 wherein said second metal comprises CoCrMo.

8. A prosthetic tibial component according to claim 1 wherein said second metal comprises a cobalt based alloy.

5 9. A prosthetic tibial component according to claim 1 wherein said second metal comprises a stainless steel.

10 10. A prosthetic tibial component according to claim 1 wherein said second metal comprises a zirconium based alloy.

15 11. A prosthetic tibial component according to claim 1 wherein said second metal comprises a material which has relatively high hardness and which is scratch resistant.